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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/636,272	08/10/2000	Alfred H. Judge	0275S-000379	7259

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EXAMINER

LIEU, JULIE BICHNGOC

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 04/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/636,272

Applicant(s)

JUDGE, ALFRED H.

Examiner

Julie Lieu

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-27 and 30 is/are rejected.
- 7) ☒ Claim(s) 28, 29 and 31-37 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>See Continuation Sheet</u> . |

Continuation of Attachment(s) 6). Other: English translation of DE 92 05 302.

DETAILED ACTION

1. This Office Action is in response to Applicant's amendment filed January 27, 2006.

Claim 25 has been amended.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

3. Claims 25-27 and 30 are again rejected under 35 U.S.C. 102(b) as being anticipated by DE 9205302U (provided by Applicant).

Claim 25:

Refer to figures 1-4, DE 9205320 (herein after as DE) discloses a power tool comprising:

- a. A power tool housing of drill 1
- b. A motor within the tool (inherent)
- c. An output coupled with the motor
- d. An activation member (inherent) for energizing the motor for rotating the output
- e. A power source (inherent) electrically coupled with the motor and the activation member
- f. A leveling mechanism comprising an LED 2 coupled with the power tool housing and the power source, the leveling mechanism positioned inside the power tool housing

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near the motor such that the power tool housing surrounds the leveling mechanism, the leveling mechanism including a rotating member (3, represented by 45 in the circuit diagram) which seeks equilibrium position which corresponds to a horizontal or vertical plane, and the light emitting device 2 projecting from the housing at a desired position on the power tool housing so that the light emitting device illuminates, in response to the rotating member equilibrium position, to indicate to a user that the power tool is in a horizontal or vertical position.

Claim 26:

The leveling mechanism in the DE reference further comprising:

- a. the housing coupled within an inside surface of said power tool housing (figs. 1 and 2);
- b. a cavity in the housing (fig. 2);
- c. the rotating member 45 in the housing, the rotating member 45 moving in said cavity such that the housing, the rotating member rotating member seeks an equilibrium position which corresponds to a horizontal or vertical plane;
- d. electrical contacts (42,44) in contact with said rotating member, the electrical contacts only completing an electrical circuit when said rotating member is in said equilibrium position;
- e. the light emitting device 2 electrically coupled with said electrical contacts; and the power source coupled with said electrical contacts for illuminating the light emitting device when the circuit is complete.

Claim 27:

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The rotating member 45 is being fixed for rotation about a center axis in a cylindrical cavity in the housing. See fig. 2.

Claim 30:

The rotating member 45 is mercury which is an electrically conducting material.

Allowable Subject Matter

4. Claims 28-29 and 31-37 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Applicant's Remarks

5. The Applicant has presented the following argument:

“The German reference relied on by the Examiner fails to anticipate Applicant's invention. The German reference illustrates a pair of bubble levels identified by reference numerals 3 and 5. The bubble levels are located on the external surface of the power tool. The leveling devices are not positioned inside the power tool housing as claimed in Claim 25.”

Response to Applicant's Remarks

6. Applicant's arguments have been fully considered but they are not persuasive.

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It is submitted that the bubble level are located on the external surface of the power tool but still position inside the power tool housing since the power tool housing includes the tool and the bubble level window (where the bubble level can be seen through). Furthermore, the bubble level still functions the same regardless whether it is located inside or on the surface of the housing. The claimed leveling mechanism positioned inside the housing would not considered inventive because the function of the device would not thereby be modified by the shift of location of parts.

For the reason stated above, the rejection is maintained.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

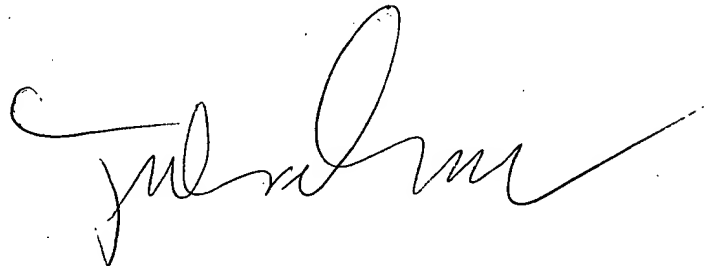
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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 571-272-2978. The examiner can normally be reached on MaxiFlex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 571-272-3068. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Julie Lieu', with a long, sweeping horizontal line extending to the right.

Julie Lieu
Primary Examiner
Art Unit 2612

Apr 11, 06

Translated from the German

Federal Republic of Germany
German Patent Office

UTILITY MODEL

DE-GM 92 05 302

Register Number 92 05 302.5

Principal class: B23B 45/00

Subsidiary classes: B 27C 3/00; B28D 1/14

Date of application: April 16, 1992

Date of publication: September 23, 1993

Title in German: Justiervorrichtung für Handbohrmaschinen

Name and residence of the owner or grantee: Paul Hermann, D-22523 Hamburg.

ADJUSTING DEVICE FOR HAND-OPERATED DRILLING MACHINES

33

Description

The invention pertains to an adjusting device for hand-operated drilling machines.

In accordance with known prior art, various adjusting devices of this genus are already known, e.g. a device for hand-operated drilling machines for the centered lateral drilling or tapping of clamping plates, boards and similar. From a remotely related prior art, there are known parallel guideways for hand-operated milling machines, with the help of which guideways a parallel alignment of the surface normal with respect to the axis of the milling machine spindle is achieved.

It is an object of the invention to create an adjusting device for hand-operated drilling machines, which device facilitates the alignment of a drilling spindle axis with a surface normal to be processed, and, in particular, simplifies the horizontal drilling or tapping of a wall built

with brick. In doing so, the usual shape of a drilling machine should be changed to the least possible extent.

As is already sufficiently known to the expert as well as to the laymen, expressing interest, a great deal of experience, or the assistance of an additional person is needed for the set objective to be achieved.

In many a great number of simpler drilling works, an exact orientation of the borehole is not an indispensable prerequisite. However, when larger appliances or devices are applied on a wall, usually a precise operation is necessary. In doing so, boreholes, which are oriented at right angle to the surface, which is being processed, are advantageous.

The task, thus described, is achieved by means of an adjusting device for a hand-operated drilling machine, which in accordance with the characteristic part of claim 1, or by means of completed hand-operated drilling machines in accordance with the characteristic parts of claim 6 or 8.

Additional embodiment forms of the invention are deduced from the subclaims as well as from the drawing wherein

Fig. 1 is the side view of a drilling machine, having a multiple number of supplements in accordance with the invention.

Fig. 2 is top view of a hand-operated drilling machine, having a multiple number of supplements in accordance with the invention,

Fig. 3 is a so-called spirit level bubble for visual verification of a horizontal orientation, mounted on a holder, and

Fig. 4 is an arrangement, consisting of a signal lamp and mercury tilt switch (tilt-switch

sensor) for the electric checking of a horizontal orientation of the mercury tilt switch.

As seen in Fig. 1, in order for the set objective to be achieved, a hand-operated drilling machine is provided with a secured spherical spirit level. In such a way it is possible - in a relatively simple way - to undertake horizontally oriented types of drilling.

In particular, an arrangement of this kind is advantageous when relatively low boreholes are to be drilled, and a control of the position of the drilling machine from the side is difficult. A concentrically, or centrally, oriented position of the air bubble 33 of the spirit level (Fig. 3) shows that the drilling machine is precisely aligned horizontally, and is also not tilted.

For the purposes of a transient or supplementary outfitting of a drilling machine with an adjusting device in accordance with the invention, a clip device, having beveled edges 4 is additionally provided.

In accordance with the invention, it is also possible to precisely execute perpendicular boreholes with the help of a comparable arrangement whereby a spirit level 5 is mounted on the reverse side of the housing of the drilling machine. In a preferred embodiment form, the spirit level 5 is permanently fixed on the housing of the drilling machine.

In yet another advantageous embodiment form of the invention, the drilling machine is provided with an electrically operated device for the measuring of the angle of inclination. This device - when the drilling machine is exactly oriented horizontally or vertically - transmits an electric signal onto an optical signal generator 2, such as e.g., an LED, or an acoustically operated signal generator 6, such as, e.g., a buzzer.

In such a way, the visual control of the spindle orientation of the drilling machine in other working heights is facilitated.

Fig. 2 shows a top view of a drilling machine 1, having the already cited adjusting devices 2 and 5, as well as a spirit level 7 in tubular form. The spirit-level's air bubble 8, which is oriented between two markings, shows the horizontal orientation of the drilling machine spindle.

An already mentioned spherical spirit level is shown in Fig. 3. This spirit level is mounted on a holder, which has edges 31 for the snapping into a receptacle, having edges 4. A circular air bubble 33 respectively assumes in a way - known in the abstract - a highest position within a liquid volume 32, respectively, provided the inner boundary of the spirit level possesses, e.g., the shape of a calotte. The central-symmetrical position of the air bubble points - in a way known in the abstract - to the vertical orientation of the surface normal .

Fig. 4 shows in an exemplified manner an electric circuit for the outfitting of a drilling machine, having a device in accordance with the invention for the measuring of the angle of inclination. This device consists of a mercury tilt switch, having electrodes 42, 44, which mercury switch has an essentially arcuate inner surface. Only in the case of a horizontal position of the electrodes lead-ins [feed wires], a contact making is possible by means of the mercury drops 45. Therefore, in that position an optically acting signal-generating device 41 is actuated in the switch, shown in Fig. 4.

In an already cited embodiment form of the invention, an acoustic signal generator 6 is actuated by means of a switch 43, which is not necessarily embodied as mercury tilt switch.

However, because the mercury switch 43 allows to switch relatively high electric loads, an optical or electrical signal generator is dispensed with in yet another embodiment form of the invention. Instead, the supply of the drilling machine motor with electric current is influenced by a switch 43. This means that the motor is actuated only when the drilling machine has assumed

the desired essentially horizontal or vertical position. As a result of this, the execution of horizontal boreholes through masonry (brickwork) is especially simplified. Within the framework of a modified embodiment form of this principle, the making of boreholes having a preset angle of inclination is achieved.

CLAIMS

1. Adjusting device for hand-operated drilling machines - consisting of a contraption for the measuring of the angle of inclination - which is permanently or temporarily fixed on a hand-operated drilling machine.

2. Adjusting device as claimed in claim 1, characterized in that the device for the measurement of the angle of inclination essentially consists of a so-called spirit level.

3. Adjusting device as claimed in claim 2, having a so-called spirit level, which is filled with a non-conducting liquid.

4. Adjusting device as claimed in claim 1, characterized in that the device for the measurement of the angle of inclination consists of an electric or electronic device for the measurement of the angle of inclination.

5. Adjusting device as claimed in claim 4, having a electrically actuated, optically acting or acoustically acting signal-generating or signal-transmitting device.

6. Hand-operated drilling machine, characterized in that there is provided a receptacle or a clamping device for a device for the measurement of the angle of inclination.

7. Hand-operated drilling machine as claimed in claim 6, characterized in that the device

for the measurement of the angle of inclination is attached by means of a clip-attachment or a snap-in device.

8. Hand-operated drilling machine as claimed in claim 1, characterized in that there is provided a device for the measurement of the angle of inclination, which device has an electric switch output, whereby the motor of the hand-operated drilling machine is actuated only when the hand-operated drilling machine is positioned in an essentially vertical way, or in an essentially horizontal way.

Translated by John M Koytcheff, M.Sc. (Engrg.)
The USPTO Translator from German & Germanic languages
USDoC/USPTO/STIC
November 10, 2005

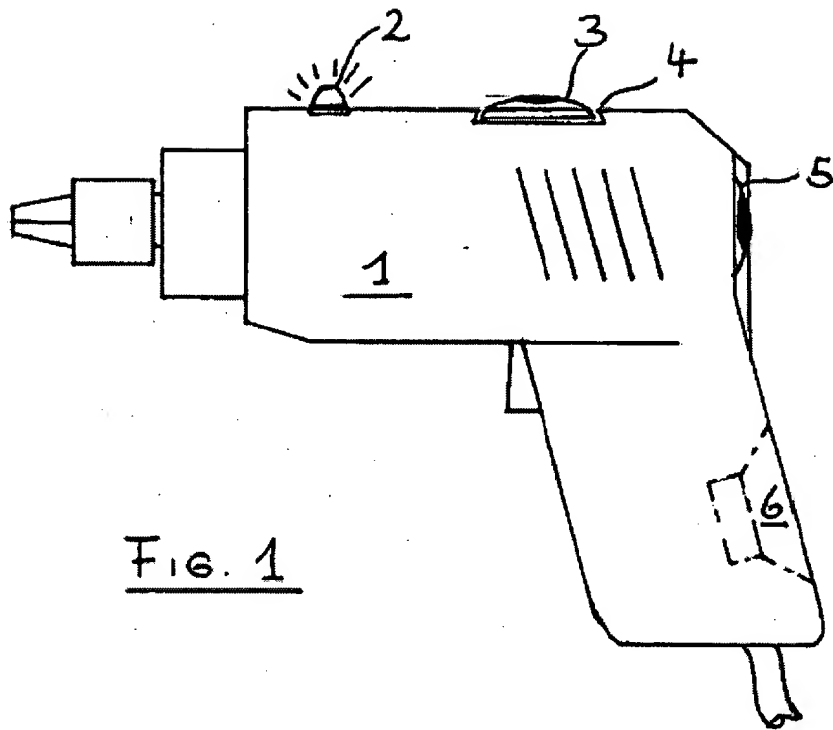


FIG. 1

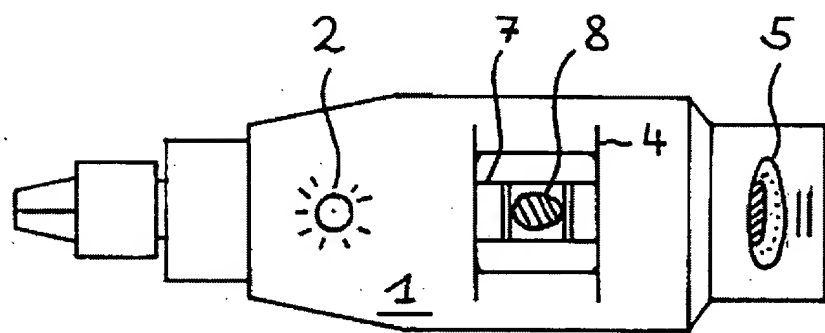


FIG. 2

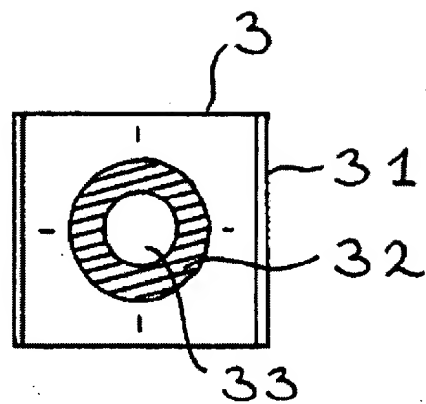


FIG. 3

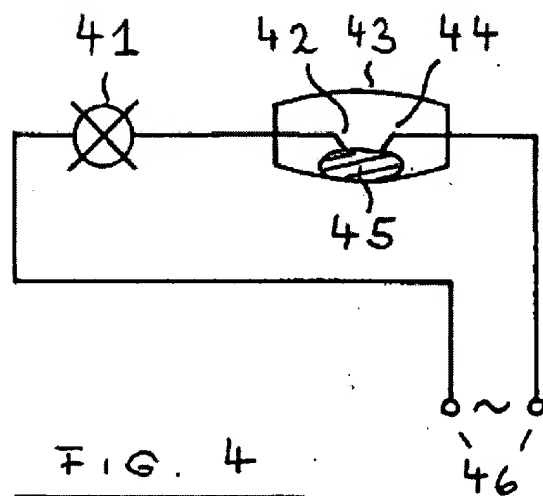


FIG. 4